

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION ELECTRONICS RESEARCH CENTER

CAMBRIDGE, MASSACHUSETTS 02139

IN REPLY REFER TO:

CQD

February 27, 1967

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Dr. Joshua Lederberg Dept. of Medicine Stanford University Stanford, California

Dear Dr. Lederberg:

Your and Dr. Grace's work on computer ennumeration and identification of trees has greatly benefitted some of our development of algorithms for identifying an optimum set of measurements for multi-terminal networks. Could you send us reports on recent work?

Enclosed are informal rough drafts of papers to be published. 67-622 "Combinatorial Algorithms for Computer-Oriented Fault Identification in Multi-Terminal Devices. 66-633 Combinatorial Analysis of Multi-Terminal Devices. Any comment or evaluation, perhaps by one of your graduate students, would of course be welcome.

There seems to be a need for interchange of information among "combinatorial-oriented algorithm" writers. Do you think the time is ripe for getting a few key people together. Perhaps a one-week tutorial workshop rather than a one-day "short paper" conference may be desirable.

Incidentally, I believe your report IRL-1036/NASA CR68896 DENDRAL-64 "Topology of Cyclic Graphs" might be of real interest to the IEEE Transactions on System Science and Cybernetics.

Sincerely,

W. W. Happ, Chief

Design Criteria Branch

Enclosures:2